

Claims

1. Open-end rotor spinning device comprising a spinning rotor, which rotates during the spinning process at a high speed in a rotor housing, which can be subjected to low pressure and which can be closed by a covering element, comprising a single motor-driven opening cylinder, which rotates in an opening cylinder housing, and also comprising an at least two-part fibre guiding channel, wherein the output-side channel section of the fibre guiding channel extends in a channel plate adapter, the centre longitudinal axis of which extends coaxially to the axis of rotation of the spinning rotor, and the input-side channel section of the fibre guiding channel is positioned in the opening cylinder housing in such a way that the centre longitudinal axes of the channel sections are arranged inclined with respect to one another, characterised in that the input-side channel section (30) of the fibre guiding channel (18) is mounted so as to be movable to a limited extent with respect to the output-side channel section (31) of the fibre guiding channel (18), the centre longitudinal line (32) of the input-side channel section (30) being displaceably arranged with respect to the centre longitudinal line (33) of the output-side channel section (31) by angles (α , β) to achieve optimal yarn-dynamic values.

2. Open-end rotor spinning device according to claim 1, characterised in that the optimal values for the respective spinning rotor (16), of the angles (α , β) which can be adjusted between the centre longitudinal lines (32, 33) of the channel sections (30, 31), can be determined empirically.

3. Open-end rotor spinning device according to claim 1, characterised in that the opening cylinder housing (19) with the input-side channel section (30), positioned in a receiver (26) of the opening cylinder housing (19), of the fibre guiding channel (18), can be rotated to a limited extent about a pivot point (S) arranged in the contact region of the channel sections (30, 31), can be adjusted in first planes parallel to the axis of rotation (17) of the spinning rotor (16) and in second planes (B) parallel to the front side of the opening cylinder housing (19) and can be fixed in a predeterminable installation position.

4. Open-end rotor spinning device according to claim 1, characterised in that the input-side channel section (30) of the fibre guiding channel (18) is configured in its orifice region (27) as a ball joint (29), which in the installed state, corresponds with the input region (35), configured as a spherical cap (34), of the output-side channel section (31), arranged in the channel plate adapter (11), of the fibre guiding channel (18).

5. Open-end rotor spinning device according to any one of the preceding claims, characterised in that the input-side channel section (30) of the fibre guiding channel (18) can be adjusted in planes, which are located parallel to the axis of rotation (17) of the spinning rotor (16) in such a way that the centre longitudinal line (32) of the input-side channel section (30) adopts an angle (α) with respect to the centre longitudinal line (33) of the output-side channel section (31) of the fibre guiding channel (18), which is between 0.1° and 10° .

6. Open-end rotor spinning device according to any one of the preceding claims, characterised in that the input-side channel section (30) of the fibre guiding channel (18) can be adjusted in planes, which are located in each case parallel to the front side of the opening cylinder housing (19) in such a way that the centre longitudinal line (32) of the input-side channel section (30) of the fibre guiding channel (18) adopts an angle (β) with respect to the centre longitudinal line (33) of the output-side channel section (31) of the fibre guiding channel (18), which is between 1° and 20° .

7. Open-end rotor spinning device according to any one of the preceding claims, characterised in that the opening cylinder housing (19) is connected to the covering element (6) via a displaceably mounted bearing bracket (40).

8. Open-end rotor spinning device according to claim 6, characterised in that the bearing bracket (40) is displaceably mounted on a pitch circle-shaped guide rail (41), can be loaded in a defined manner by an actuating drive (43) and can be locked in predeterminable positions.

9. Open-end rotor spinning device according to any one of the preceding claims, characterised in that the bearing bracket (40) has a pitch circle-shaped guide device (42), on which the opening cylinder housing (19) is displaceably mounted and can be transferred into predeterminable positions by means of an actuating drive (44).